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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW 18047 Application Number Filed I certify that this document is being facsimile transmitted to the United August 7, 2003 10/636,158 States Patent and Trademark Office, First Named Inventor 571-273-8300) MacRae Signatu Art Unit Examiner Typed or printed 2615 Devona E. Faulk Capriglione Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. RECEIVED CENTRAL FAX CENTER This request is being filed with a notice of appeal. APR 16 2007 The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the applicant/inventor. Signature assignee of record of the entire interest. Brian C. Oakes See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) Typed or printed name attorney or agent of record. (302) 633-2770 Registration number Telephone number attorney or agent acting under 37 CFR 1.34. 2007 Registration number if acting under 37 CFR 1.34 41.467 NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*. \*Total of forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tradeamrk Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Application No. 10/636,158 TECHNOLOGY CENTER 2615

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

: 2615

Examiner

: Devona E. Faulk

Serial No.

: 10/636,158

Filed Inventors August 7, 2003

Title

: Roderick MacRae

APPARATUS, METHOD AND ARTICLES OF MANUFACTURE

FOR A MICROPHONE

: ENCLOSURE

Dated: April 16, 2007

Docket No.: 18047

Confirmation No.: 3609

## PRE-APPEAL BRIEF REQUEST FOR REVIEW TECHNOLOGY CENTER 2615

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicant requests review of the Final Rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a Notice of Appeal.

Review is requested for the reasons stated on the attached four (4) sheets.

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#### Remarks

Claims 1-12 are currently pending in the present application. However, Applicant is presenting arguments under the assumption that the Amendment After Final filed February 2, 2007 has been entered, as indicated in the Advisory Action dated March 14, 2007.

#### Claim Rejections under 35 U.S.C. §103

The Applicant acknowledges the rejection of Claims 1-12 under 35 U.S.C. §103(a) as being unpatentable over the applicant's admitted prior art (AAPA) in view of U.S. Patent No. 4,434,507 to Thomas, hereinafter "Thomas". Nonetheless, the Applicant respectfully submits that the claims are fully patentable over the combination of AAPA and Thomas.

Independent claim 1 recites "a plurality of openings forming at least one tortuous path leading to at least one inlet." Independent claim 6 recites a "first opening proximate said microphone", "a second opening proximate said microphone" and "at least one tortuous path formed by a convergence of said first opening and said second opening...." Independent claim 10 recites "a first and a second opening in said casing, both openings being proximate to said microphone" and at least one tortuous path formed by a convergence of said first and second openings..."

AAPA, to the contrary, discloses a <u>single</u> opening 108, through which sound enters a <u>single</u> tortuous path to reach a <u>single</u> inlet to microphone element 112. As acknowledged by the Office Action, AAPA fails to disclose an inlet having a plurality of openings. The Office Action then looks to Thomas to provide this feature.

Thomas is directed to a free standing transmitting microphone holder assembly 10 for use in connection with conference tables. (see Fig. 1, and col. 2, lines 4-9 of Thomas). In relevant part, the microphone assembly 10 of Thomas includes a cylindrical housing 14 having an upper portion 22 that is molded or machined to form a concave, conical entry 23. (see Fig. 3, and col. 2, lines 25-29 of Thomas). The apex of this concave, conical entry 23 forms an opening 24 for supporting a microphone 42. Positioned over the entry 23 is an electrically conductive top member 31, formed to have a convex conical underside 33 to complement the conical entry 23. (see Fig. 3, and col. 2, lines 30-33 of Thomas). A plurality of conductive members 34 are used to secure the top member 31 above to the housing 14. As shown in Fig. 2 of Thomas, the underside of the top member 31 and the

entry 23 combine to form a <u>single</u>, omni-directional acoustic pathway to the microphone 42. Indeed, this <u>single</u> pathway enables sounds from around a conference table to be channeled "...avoiding any restrictions..." through to the microphone 42. (see col. 3, lines 20-26 and lines 40-43 of Thomas). Thus, Thomas like AAPA fails to disclose multiple openings as variously set forth in independent claims 1, 6 and 10 described above.

In the Advisory Action dated March 14, 2007, the Examiner indicates that FIG. 3 of Thomas shows "multiple" openings. Applicant however notes that FIG. 3 of Thomas is a sectional view of the transmitting microphone. FIG. 3 shows the microphone as if it is "sliced" in half, which would give the appearance of multiple openings. While there appears to be at least two openings in FIG. 3, the microphone as shown in perspective in FIG. 2 confirms that the transmitting microphone only shows a single opening.

Moreover, the alleged motivation for combining AAPA with Thomas is to provide multiple openings to the inlet so that sound is better directed to the microphone. Applicant respectfully submits that one skilled in the art would <u>not</u> have been motivated to modify AAPA by Thomas, since Thomas, as discussed above, does not disclose multiple openings, as variously recited in independent claims 1, 6 and 10.

Even if Thomas were somehow interpreted to have multiple openings, these openings do not converge to form a tortuous path, as variously recited in independent claims 1, 6 and 10. The cited motivation for combing AAPA and Thomas is to provide AAPA with multiple openings so that sound is better directed to the microphone. The Applicant acknowledges that having multiple openings in a casing is desirable, particularly for improving the sound that reaches the microphone.

However, having multiple openings, as explained by AAPA, may leave the microphone element vulnerable to "...an object such as a wire that could enter the hole and pierce the microphone gasket and/or microphone element itself." (see paragraph [0004] of AAPA). To remedy this deficiency, AAPA developed casings having a single opening forming a single tortuous path to the microphone element. (see Figs. 1(a)-1(b) of AAPA). In this manner, sound could still reach the microphone, but objects would be prevented from entering the inlet far enough to reach the microphone. Prior to the Applicant's invention, however, achieving a microphone casing having both multiple openings for improved sound and a protective tortuous path was not known. Indeed, as evidenced by both AAPA and Thomas, prior art casings were either designed to provide

protection for the microphone (as in AAPA), or to improved sound quality via multiple openings, as in Thomas.

Referring again to Thomas, Applicant submits that Thomas is directed to improved sound quality, to the exclusion of protecting the microphone. As explained by Thomas, the "...free standing transmitting microphone assembly of the present invention provides both an attractive accommodation for transmitting microphones and an efficient collection means for sounds generated at a conference table." (emphasis added). (see col. 3, lines 36-40 of Thomas). Indeed, the smooth, concave entry to the microphone 42 provides an improved pathway that enables sound to reach the microphone 42 with no restrictions. (see Fig. 2, and col. 3, lines 40-43 of Thomas). One in the art would appreciate, however, that this pathway is far from tortuous, insofar as is has no change of direction that can prevent an object from entering far enough to pierce the microphone. In fact, the pathway disclosed by Thomas would facility an object's entry and guide such object into the microphone chamber 24. Therefore, if Thomas were combined with AAPA, the casing of AAPA would have no tortuous path, but rather a non-tortuous concave entry through which objects could easily reach and damage the microphone element. Such a combination would render inoperable, as the protective feature of AAPA would be removed in favor of the sound improving entry of Thomas.

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#### Conclusion

In view of the foregoing, the Applicants submit that Thomas neither discloses multiple openings nor a tortuous path, as recited in the claims of the present application. As such, an AAPA-Thomas combination fail to recite each and every claim element recited in the claims. Accordingly, Applicant submits that the claims are fully patentable over the theoretical combination of AAPA and Thomas, and earnestly request a notice reflecting the same.

Respectfully submitted,

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